

Claims:

Please amend the claims as follows:

- 5 1 (currently amended) - ~~A confocal~~ Confocal optical device for illuminating ~~at least one a~~
plurality of illuminated points point (309) using a plurality of an-illuminating beams beam
coming from an illumination source (~~300~~308) and focused on said plurality of illuminated
points point, and for focusing on a plurality of microscopic holes a microscopic hole (306)
associated with the plurality of illuminated points point - a plurality of beams beam to be
10 detected coming from the plurality of illuminated points point, comprising:
- a beamsplitter (321) passed through by a first plurality of beams beam (FD) and
reflecting a second plurality of beams beam (FE), one of the first and second pluralities of
beams being the plurality of illuminating beams beam (FE), and the other being the
plurality of beams beam to be detected (FD),
15 - a redirection mirror (320) substantially parallel to the beamsplitter and attached to the
beamsplitter, the assembly consisting of the beamsplitter and the redirection mirror being
exchangeable, and the redirection mirror being disposed to reflect the second plurality of
beams.

~~Characterised by the following facts:~~

- 20 ~~—it is adapted for illuminating a plurality of points using a plurality of illuminating beams~~
~~and for focusing on a plurality of microscopic holes the beams to be detected coming from~~
~~the plurality of illuminated points, and~~
~~—the redirection mirror is disposed in order to reflect the second beam.~~

- 25 2 (currently amended) - ~~Optical~~ The optical device according to Claim 1, characterised by
the fact that said beamsplitter and redirection mirror are placed in an afocal zone, in which
~~the each~~ each illuminating beam and ~~the each~~ each beam to be detected are substantially parallel.

Claim 3 (canceled).

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- 4 (currently amended) - ~~Optical~~ The optical device according to Claim 1, characterised by
the fact that the beamsplitter (602) and the redirection mirror (603) are placed on two
opposite faces of a parallel window (600).

5 (currently amended)- ~~Optical~~ The optical device according to Claim 4, characterised by the fact that the beamsplitter and the redirection mirror are made by depositions of thin coatings on the parallel window.

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6 (currently amended)- The optical device ~~Device~~ according to claim 4 , characterised by the fact that the parallel window is disposed so that

- the optical path of the second plurality of beams ~~beam~~-(FE) comprises successively a first passing-through of the parallel window, a reflection on a first mirror, a
10 second passing-through of the parallel window, a reflection on a second mirror, and a third passing-through of the parallel window, one of the first and second mirrors being the redirection mirror and the other being the beamsplitter, and

- the optical path of the first plurality of beams ~~beam~~-(FD) comprises a passing-through of the parallel window and a passing-through of the beamsplitter.

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7 (currently amended) - The optical device ~~Device~~ according to claim 1, characterised by the fact that said beamsplitter is a dichroic mirror and said redirection mirror is a totally reflective mirror.

20 8 (currently amended) - The optical device ~~Device~~ according to claim 1, , characterised by the fact that said beamsplitter is a beamsplitter that is neutral as regards wavelength and said redirection mirror is a totally reflective mirror.

9 (currently amended)- The optical device ~~Device~~ according to claim 1, characterised by
25 the fact that it comprises a plurality of splitter units each comprising a beamsplitter and a corresponding redirection mirror, and by the fact that it comprises a means for alternately placing one or another of the splitter units on ~~the optical path~~ the plurality of illuminating beams.

30 10 (currently amended)- The optical device ~~Device~~ according to Claim 9, characterised by the fact that said means for placing is a slider.

11 (currently amended)- The optical device ~~Device~~ according to Claim 9, characterised by the fact that said means for placing is a wheel turning about an axis and on which the splitter units are mounted.

- 5 12 (currently amended)- The beamsplitter ~~Beamsplitter~~ unit intended for a confocal optical device according to Claim 1, characterised by the fact that it consists of a parallel window,
- a first face of said window comprising a first area on which a dichroic or partially reflective mirror is made by deposition of at least one thin coating, intended to be passed through by ~~a first light beam~~ the first plurality of beams and to reflect ~~a second light beam~~
 - 10 the second plurality of beams,
 - the first face of said window comprising a second non-reflective area, intended to be passed through by the second light beam,
 - a second face of said window, opposite to the first face, comprising a third area on which ~~a~~ the redirection mirror is made by deposition of at least one thin coating, intended to
 - 15 reflect the second light beam,
 - the second face of said window also comprising a fourth non-reflective area, intended to be passed through by the first light beam and by the second light beam.